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San Francisco, Calif. Dept. of City Planning

(MEMORANDUM REPORT #61.4)



TO:

The Mayor  
The Board of Supervisors  
The Mayor's Transportation Council  
The City Planning Commission

FROM:

James R. McCarthy, Director of Planning and  
Chairman, Transportation Technical Committee

SUBJECT:

REPORT ON THE CURRENT STATUS OF RAPID TRANSIT PLANS FOR  
THE SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT, PAR-  
TICULARLY AS THEY CONCERN ROUTES WITHIN SAN FRANCISCO.

Plans Proposed by the Rapid Transit District

On

August 11, 1960

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*Contents:*

Suggested Changes Proposed by the Transportation  
Technical Committee and the Mayor's Transportation  
Council in October and November 1960 ;

Revised Plans Adopted by the Rapid Transit District  
on February 9, 1961 ;

Previous Plans Considered by District Consultants  
and the Transportation Technical Committee.

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Transmitted herewith for your information and consideration is a report on the current status of rapid transit plans in San Francisco, including plans proposed by the Board of Directors of the San Francisco Bay Area Rapid Transit District on August 11, 1960 for consideration and study of local government agencies and other interested parties within the District, analyses and recommendations concerning these plans made by the San Francisco Transportation Technical Committee and endorsed by the Mayor's Transportation Council, and plans adopted by the District Board of Directors on February 9, 1961. Emphasis has been focused on the location of routes within San Francisco.

James R. McCarthy,  
Director of Planning and  
Chairman, Transportation  
Technical Committee

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## Main Features of the Proposed Rapid Transit Plan for the Bay Area

On February 9, 1961 the Board of Directors of the San Francisco Bay Area Rapid Transit District adopted, by Resolution No. 161, "Plans for Routes, Rights-of-Way Terminals, Stations, Yards, and Related Facilities and Improvements" as a basis for preparation of plans for a Bay Area rapid transit system to be submitted, together with financial proposals, to the Boards of Supervisors of the five counties within the District, as required in Section 29152 of the State Public Utilities Code.

In this February 9, 1961 Resolution, the Board of Directors of the San Francisco Bay Area Rapid Transit District proposed a 126-mile \$1,152,806,000 high-speed, grade separated, electric rail rapid transit line to link the five counties in the district to the urban centers of San Francisco and Oakland, and other important Bay Area employment areas. The service to be supplied would be of a very high standard, with frequent headways, and designed to reduce freeway and highway congestion by reducing the need for use of personal automobiles for many types of daily travel, particularly the peak hour commuter movements.

With a transbay underwater tube connecting downtown San Francisco to downtown Oakland as the center of the system, other lines would connect with the transbay tube, fanning out to Richmond, Concord and Fremont on the east side of the Bay and to Santa Venetia (beyond San Rafael) and Palo Alto on the west side of the Bay.

### Rapid Transit Routes Proposed Within San Francisco

Lines in the proposed system located within San Francisco include:

1. Marin Line: A subway under Post Street from a terminal at Market Street to Presidio Avenue, thence northwesterly in a tunnel under Presidio Heights, a short section of surface line in the Presidio and a tunnel through the Presidio to the Golden Gate Bridge and north into Marin County.
2. Transbay-Peninsula Line: The underwater tube would pass near the Ferry Building and come up to subway level under Market Street as the lower level of a double-deck four-track structure which would extend along Market Street from First Street to Van Ness Avenue. A subway under Mission Street and Chenery Street would bring it to a station at Ocean Avenue where it would proceed in the center division strip of the Southern Freeway, and in or alongside the freeway to the county line and to San Bruno and Palo Alto.
3. Market Street Streetcar Subway: From First Street to Gough Street, the upper level of the four track, two-level Market Street subway would be initially leased to the San Francisco Municipal Railway for use by its tunnel-line P.C.C. streetcars. At an indefinite date in the future, it is expected the space may be needed for operation of additional district rapid transit lines as increased patronage taxes the facilities of the lower deck line. It was deemed inadvisable and impractical to open up Market Street a second time to add the extra tracks at a later date, so it was decided to include it in the structure now and utilize it for speeding up the existing streetcar service, thus providing a direct benefit to residents in areas served by the tunnel car lines.

Changes in Routes in San Francisco from Plans Proposed by the District on August 11, 1960.

On August 11, 1960, the Board of Directors of the Rapid Transit District submitted a tentative plan for the Bay Area Rapid Transit System to the San Francisco Board of Supervisors, as well as to boards of supervisors of the other four counties, city councils and city planning commissions of the cities in these counties, state, Federal and regional agencies, such as the State Public Utilities Commission, the State Department of Public Works, the U. S. Army Corps of Engineers, the University of California, Stanford University, and various civic and business groups. Comments and suggestions were invited as to ways in which the plans could be modified to meet the needs of the groups or agencies concerned, to the end that final plans submitted later to the Boards of Supervisors of the five counties in the District would not contain features which inherently jeopardized endorsement of the entire plan by these boards as is required by law.

This August 11 plan differed from that adopted on February 9 in the following respects:

1. San Miguel Tunnel

In the Peninsula line a long tunnel from Market Street and Guerrero Street to the Ocean Avenue Station on the Southern Freeway had been proposed instead of the Mission Street Subway-Southern Freeway alignment finally adopted.

(It should be noted that the District Board of Directors in its proceedings in January of 1961 as Committee of the Whole Board, in discussing this change of alignment, took note of the fact that if the center division strip of the Southern Freeway together with the space assigned to future fourth traffic lanes in each direction could be utilized for the rapid transit line, this route would be financially feasible. If, however, as indicated by correspondence with the State Department of Public Works, the Southern Freeway right-of-way -- now being acquired -- would have to be widened to allow for the rapid transit tracks and four traffic lanes in each direction, an expenditure of an additional ten million dollars, chargeable to the District, would be necessary. It was implied that it was up to the City and County of San Francisco to assist materially in getting this agreement for only three traffic lanes in each direction in the joint right-of-way area, or face the possibility that an elevated line along Alemany Boulevard, studied as an alternate route, would have to be adopted as the economically feasible choice. San Francisco has opposed this elevated.)

2. Geary Elevated

On the Marin Line, the subway would have gone from Post Street in a diagonal tunnel to Geary Boulevard where it would have emerged from the subway to an overhead structure on Geary Boulevard from Spruce Street to Park-Presidio Boulevard, where it would have turned northward to parallel Park-Presidio Boulevard to the Presidio. There it would have been placed in a tunnel to the Golden Gate Bridge. The diagonal tunnel under Presidio Heights into the Presidio was substituted in the February plans, and the Geary elevated was eliminated.

3. Extension of Suburban Terminals

In the August 11 report, outer terminals were at Redwood City on the Peninsula Line, Hayward on the Southern Alameda County Line, Pleasant Hills on the Contra Costa Line, and Cutting Boulevard in El Cerrito on the Richmond Line. In the February 9 report these had been extended to Palo Alto (Peninsula Line), Fremont (Southern Alameda County Line), Richmond (Richmond Line) and Concord (Contra Costa Line).

Review of the District's August 11 Plan by the San Francisco Transportation Technical Committee

The Transportation Technical Committee (which in May of 1960 had submitted a proposed long-range rapid transit plan for San Francisco consonant with Bay Area Rapid Transit District plans for interurban rapid transit) was asked to review the Districts August 11 plans. The committee made an intensive study and on October 19, 1960 presented a report, including a majority report favoring a single Peninsula rapid transit line via a Mission Street subway and the Southern Freeway, and a minority report favoring two Peninsula rapid transit lines, one via the Southern Pacific Railway Bayshore alignment, and the other via the Twin Peaks Tunnel to Daly City.

In November, the Mayor's Transportation Council, consisting of the Chief Administrative Officer and the chairmen of the City Planning Commission, the Public Utilities Commission and the Parking Authority, unanimously endorsed the committee's majority report, in which the following changes to the Districts August 11 plans were recommended:

1. Elimination of the elevated section on outer Geary Boulevard, and substitution of subway.
2. Elimination of San Miguel Tunnel route and substitution of a subway under Mission Street, a tunnel under Chenery Street, and a route in the center division strip of the Southern Freeway southwest of Monterey Boulevard which would allow for stations serving the Mission Street business district and nearby residential areas not possible with the deep long San Miguel Tunnel alignment.
3. Extension of the Market Street Streetcar Subway from First Street to Clay and Front Streets adjacent to the Golden Gateway Redevelopment Project area, and from Guerrero Street to the portal of the Twin Peaks Tunnel to provide true rapid transit operating characteristics for the P.C.C. cars now slowed by congested Market Street traffic.
4. Changes in downtown station locations and elimination of a continuous pedestrian mezzanine.
5. Authorization of a bond issue for the District system sufficiently large to assure the construction in later stages of all routes considered necessary now but curtailed by the Board of Directors of the District because they exceeded the bonding capacity of the District based on present property values (or expected values at the end of the construction period).

Review by the Supervisors County State and National Affairs Committee:

This committee report, as endorsed by the Mayor's Transportation Council, was presented in December to the Board of Supervisors Committee on County, State, and National Affairs, together with maps and oral discussions of majority and minority points of view. Officials and Board members of the District were present and made statements. Although it had been announced by the Chairman at the Committee hearing that later hearings would be held by the Committee, with civic and neighborhood groups to be invited to participate, it was subsequently decided to postpone full consideration by the Board of Supervisors of the rapid transit proposals until final plans were presented to it by the District in the late Spring or Summer of 1961. Thus, the Transportation Technical Committee majority report would be utilized by the District Board of Directors as an indication of initial San Francisco reactions to the August 11 plan.

Actions Taken by the Rapid Transit District on Plan Changes Proposed by the Transportation Technical Committee

Of the five changes proposed by the Transportation Technical Committee and endorsed by the Mayor's Transportation Council cited above, affecting the August 11 transit plans proposed by the District, disposition by the District Board of Directors in reformulating its plans as finally approved February 9 was as follows:

1. Substitution of Subway for Elevated on Geary Boulevard: In the new plan, the Geary elevated was eliminated by substituting a diagonal tunnel route directly from Post Street and Presidio Avenue to the Golden Gate Bridge. Thus the city's objection was overcome, but the station at Geary Boulevard and Eleventh Avenue was lost in the process.

2. Elimination of San Miguel Tunnel and Substitution of a Mission Subway: This change recommended by the city, was adopted as noted above, with the implied proviso that this be obtained without the necessity of expenses to widen the freeway right-of-way.

3. Extensions of Upper Level P.C.C. car Subway to Twin Peaks Tunnel and to the Golden Gateway Project. Although the District Board felt these were desirable they did not feel they could be financed by the District in the first construction and financing phase. Thus, they were not adopted for inclusion in the February 9 plans.

4. Changes in Downtown Station Locations. These were agreed to. Elimination of the continuous pedestrian mezzanine is to be passed on at a later date when more was known about probable utilization and reaction of nearby merchants.

5. Long Range Financing: This was not passed on directly but there were indications that construction should be phased over a longer period of time so that higher later assessment totals could be taken advantage of for a more complete system. Inclusion of later-phase San Francisco projects, such as a Twin Peaks Line or a Bayshore express line was not included in this construction period extension, however.

The Proposed Rapid Transit System in Detail

The system outlined in the February 9 plan of the District would connect downtown San Francisco with downtown Oakland, and would connect these two centers with cities throughout the five-county area via high-speed, grade-separated electric trains with high service standards and frequent headways. A basic objective is to provide a service that will attract patronage from interurban automobile drivers, and passengers who would otherwise ride in automobiles, particularly during peak hours. Unless such a system is built, it is predicted: (1) that Bay Area freeways will become intolerably congested, or (2) many more freeways and parking garages will be needed, removing great quantities of valuable land from other more economic use and from the assessment rolls, or (3) downtown and employment areas will suffer an economic decline because of their inaccessibility due to vehicular congestion.



The proposed system is basically interurban in nature, and stations would be between one and one-half to two and one-half miles apart. The outer stations would be collection points for feeder buses and would have from several hundred to a thousand auto parking spaces adjacent to each station. Speeds up to 80 miles per hour are contemplated with average speeds, including stops, of over 45 miles per hour. The most modern equipment would be used, with a seat available to every passenger in most cases. Downtown termini in San Francisco would be within a short walking distance of the destination of most patrons.

The proposed Bay Area-Wide system is described below:

1. Trans-Bay Tube: From the lower-deck subway on Market Street, the tube would pass near the Ferry Building and under the Bay to emerge on the east side in the Southern Pacific mole where yards and shops would be located. Paralleling the Eastshore Freeway near Sixth Street, it would enter a subway turning north under Broadway to a station at Eleventh Street and Broadway where it would connect with the Berkeley-Richmond Line, the Central Contra Costa Line and the Southern Alameda County Line.
2. The Central Contra Costa Line would proceed by subway, by at-grade location in the center division strip of the Grove-Shafter Freeway, by a long tunnel under the Berkeley Hills and private right-of-way to Concord, serving Orinda, Lafayette and Walnut Creek.
3. The Berkeley-Richmond Line would proceed on elevated structure along Grove Street and Adelaide Street with a section of subway on Shattuck Avenue in Berkeley, thence via elevated, parallel to Hearst Avenue and to the Santa Fe tracks, to Cutting Boulevard in El Cerrito, and parallel to the Santa Fe tracks to downtown Richmond.
4. The Southern Alameda County Line would proceed south, parallel to the Western Pacific tracks on elevated structure and at grade, via Hayward to Union City and Fremont.
5. The Marin Line: From a terminal station at Montgomery, Market and Post Streets (connecting with the Montgomery Street station of the Transbay-Peninsula Line) the Marin Line would proceed in a subway under Post Street. At Presidio Avenue a diagonal tunnel under Presidio Heights would take the line into the Presidio. After a short stretch of line in open cuts and on fill it would proceed in a tunnel under most of the Presidio to the Golden Gate Bridge, which it would cross on tracks built on a lower deck. A long tunnel would bring the line to Sausalito, and Northwestern Pacific Railway right-of-way would be utilized to a terminal at Santa Venetia, north of San Rafael. Right-of-way would be acquired for an eventual extension to Ignacio. Stations in San Francisco would be located at Montgomery Street, Union Square, Van Ness Avenue, Fillmore Street, and Presidio Avenue.
6. The Peninsula Line: On the lower deck of the Market Street Subway, this line (being a continuation of the Transbay Tube--the same trains would continue right on, in through service) would go under Market Street to Van Ness Avenue, and under Mission Street and Chenery Street to Ocean Avenue where it would emerge to continue at grade in the center division strip of the Southern Freeway, and in, or alongside the freeway to Daly City. The old Valencia Branch right-of-way of the Southern Pacific, parallel to Junipero Serra Freeway would be utilized to Colma where the old "Line 40" street car track right-of-way of the Municipal Railway would be occupied to San Bruno and on to Burlingame. From here to Palo Alto, the tracks would parallel those of the Southern Pacific mainline route on S. P. property with

grade separations to serve both carriers. Stations within San Francisco would include those on the Market Street Subway at Montgomery Street, Powell Street, Ninth Street, and Van Ness Avenue; on the Mission Subway at Twenty Second Street and at Ocean Avenue as well as a station just south of the county line in Daly City near Alemany Boulevard. Some trains might operate only as far as Daly City as shuttles for the benefit of close-in passengers.

7. Market Street Subway for Streetcars: Since it is the position of the District consulting engineers that, within a predictable period from the opening of the system, patronage will be generated that may overtax the facilities of a two-track subway under Market Street, the District is proposing that a four-track, two-level subway be constructed under Market Street from First Street to Van Ness Avenue with the top level extended to Gough Street, for the eventual use of District rapid transit trains. For an interim period, however, the District proposes that this space be leased to the Municipal Railway for use of its P.C.C. streetcars (possibly coupled together in trains of two or three cars for greater track capacity as is now done in similar operations in Boston and Cleveland). Surface tracks would extend from this top-level streetcar subway east of First Street and west of Gough Street.

#### Routes for Rapid Transit Lines Previously Studied

On May 2, 1960, the consulting engineers for the Bay Area Rapid Transit District had presented for study purposes and cost analysis a plan involving two rapid transit lines to the Peninsula, both of which differed from the Peninsula Line proposed in the August 11 report, and in the February 9 adopted plan:

1. The Bayshore Line: Leaving the Market Street two-level subway at Ninth Street, this line would have proceeded via subway under Ninth Street and in a tunnel under Potrero Hill parallel to the existing Western Pacific Railway tunnel, and joined the Southern Pacific mainline right-of-way at Tunnel No. 2 near Army Street, proceeding south to San Bruno on the S. P. right-of-way, with stations at Army Street and at Bayshore on the county line, and on to Palo Alto on S. P. right-of-way.

2. The Twin Peaks Line: In this concept, the upper level of the Market Street two-level subway would have been utilized for a District-operated rapid transit line from Front and Clay Streets bordering the Golden Gateway Redevelopment Project to Daly City via the Twin Peaks Tunnel. West of Ninth Street, this line would have had stations at Van Ness Avenue, Church Street, Castro Street, Forest Hill, West Portal, St. Francis Circle, Stonestown, Parkmerced and Daly City, and, except for the southern terminal area, would have been entirely in subway, following West Portal Avenue and Nineteenth Avenue west of the Twin Peaks Tunnel. To accommodate cars contemplated for use on the District system which were judged to be too wide for the existing tunnel, it was proposed to bore a new parallel one-track tunnel and use the existing tunnel for only one track rather than attempting to widen Twin Peaks Tunnel. Under this scheme, the rapid transit trains would supplant the existing street car service and feeder buslines serving the Sunset would connect at stations.

On June 6, the District's consulting engineers presented another plan for review by the Board of Directors and for cost estimates. The May 2 plans had been felt by the Board of Directors to be too costly for the District's financial resources. Thus, in the June 6 report the suburban lines were shortened, and one Peninsula Line was substituted for the two Peninsula lines outlined in the May 2 report:

The Mission Line in the June 6 report would have turned off Market Street at Van Ness Avenue and would have gone under Mission Street in subway and through a tunnel under Chenery Street to emerge in the Center dividing strip of the Southern Freeway near Monterey Boulevard, thence following the freeway to the county line. Stations would have been at 22nd Street and Ocean Avenue. An alternative, known as the "Mission-Alemany Route" would have placed the line on an elevated structure on Alemany Boulevard, on a single-post concrete structure in the center division strip.

This "Mission-Alemany" elevated alternate was considered as the route that might have to be followed if arrangements could not be worked out with the State Department of Public Works to occupy the Southern Freeway center mall and "extra lane" space.

#### Detailed Discussion of Recommendations of the Mayor's Transportation Council

Based on the recommendation presented in a report made by a majority of the Transportation Technical Committee, the Mayor's Transportation Council made recommendations in November of 1960 regarding the proposed routes and plans for rapid transit lines in San Francisco outlined in the August 11 report:

1. Amount of Bond Issue Sufficient to Cover Needed Additions and Extension  
It was recommended that the amount of the bond issue presented by the District Board of Directors to the five counties Board of Supervisors and later to the electors of the district, be sufficient to authorize the ultimate construction of all rapid transit routes now considered essential for good rapid transit service to the District. This would include (a) authority to construct lines to termini proposed in the May 2 report, and (b) authority to construct eventually the Bayshore Line, the Mission Line and the Twin Peaks Line in San Francisco. Under such a plan, construction would have to be divided into first, second and third stages of construction to be financed when (as is confidently expected) the assessed value of property within the District will have increased to the point where the later-phase construction bonds could be issued under the District's 15 per cent limitation of assessed value for bonds outstanding. The system could be judged by the electorate at the time of the first bond election on its over-all merits and voted on at one time, thus assuring future financing of the system as a whole regardless of the order of staging of construction of separate portions.

2. Transbay Tube: It was recommended that the District plans for this be accepted.

3. Marin Line: It was recommended that the location of route and stations for this line be accepted as presented in the District's August 11 report, but it was recommended that instead of an elevated section on Geary Boulevard and Park-Presidio Boulevard between Spruce Street and the Presidio boundary that this portion be placed in subway. It was felt that the recent public and private improvements on Geary Boulevard would be counteracted by the presence of the elevated structure and that it would have an adverse effect on nearby commercial and residential properties.

4. Peninsula Line: It was recommended that the San Miguel Tunnel alignment be opposed by San Francisco as giving insufficient service along the route north of Ocean Avenue. Because of the length and depth of the tunnel, this area would be by-passed for all time. Instead, the Mission-Southern Freeway alignment, under study by the District's consulting engineers at the time the June 6 report

was made public, should be substituted. This would provide an opportunity for two additional San Francisco stations in the Mission Street business district now. At a later time, if the Bayshore Line were to be built as a Peninsula express line, when patronage increases necessitated more than one Peninsula line, the Mission Line could have more local stations added to it to provide more urban rapid transit service to San Franciscans. The Alemany Boulevard elevated alternative was rejected as being detrimental to residential amenities in the district traversed.

5. Market Street Subway: It was recommended that the District's August 11 proposals for a two-level four-track subway under Market Street, involving use of the top level for a street-car subway, be accepted with certain suggested additions and modifications, as follows:

a. that the upper level Market Street subway be extended eastward from First Street to Front Street and under Front Street to a loop terminal and station at Front and Clay Streets at the edge of the Golden Gateway Redevelopment Project area.

b. that the upper level Market Street subway be extended westward from Guerrero Street to the east portal of the Twin Peaks Tunnel with provision for entrance ramps for streetcar lines from the Duboce Tunnel and the Church Street lines, and with stations at Church Street and Castro Street.

c. that a proposed continuous mezzanine over the Market Street Subway from First to Ninth Streets be eliminated, as well as a proposed continuous mezzanine over the Post Street Subway from Kearny Street to Union Square Station, since it was felt that possible benefits were out-weighed by maintenance costs and policing problems.

d. that the Montgomery Street Station on the Market Street Subway be relocated one block east so that it would extend from Montgomery Street to Sansome Street rather than from Kearny Street to Montgomery Street. This would place it closer to the area of highest concentration and potential patronage in the financial district.

e. that the Powell Street Station likewise be relocated one block east so that it would extend from Powell Street to Stockton Street rather than from Mason Street to Powell Street. This would place it closer to the center of the central retail shopping district.

#### Comparison of Alternate Lines to the Peninsula

When the Transportation Technical Committee made its interim report and recommendation on an ultimate rapid transit system for San Francisco in February 1960, it recommended a network of four basic lines to serve the city's needs: The Post-Geary-Marin Line, the Twin Peaks Line, the Mission Line and the Bayshore Line. All, except the Mission Line, were recommended by the Committee for first-stage construction by the District. This pattern was reflected in the May 2 report of the District consultants where routes and cost estimates for these three routes were reported on.



With the action of the Board of Directors of the District in instructing their engineers to effect economies in the plans outlined in the May 2 report (including the elimination of considerable mileage at the ends of each of the suburban lines), it became increasingly apparent to the majority members of the Transportation Technical Committee that it would be unrealistic to anticipate that two Peninsula rapid transit lines, such as the Bayshore Line and the Twin Peaks Line could be financed in the first stage of construction (even if substantial savings could have been effected by possible alterations in the plans). Thus, the choice of this single Peninsula route, so that it would provide maximum service to San Franciscans, became important.

The Twin Peaks Line, as the sole Peninsula connection, was ruled out since the high-volume suburban train patronage would displace the existing local patronage now utilizing the tunnel streetcar lines and there would not be room enough on the trains for both sets of patrons. This would eliminate for local use San Francisco's best existing mass transit facility--the Twin Peaks Tunnel.

The Bayshore Line had much to offer since it involved lower construction costs than the Mission Line, but patronage predictions showed it would serve about 30,000 San Francisco Passengers per day in contrast to the 47,000 per day that would be served by the Mission-Southern Freeway Line. Only half this number of San Francisco passengers, or about 24,000 per day would have been served by the San Miguel Tunnel alignment. In addition many thousands of passengers from the Daly City station would not be served by a Bayshore alignment, of paramount importance to San Mateo County.

The development potential of the Mission District from the location of an interurban rapid transit system traversing it was also a factor in its favor. This would not only be a factor in the first stage, but later when a Bayshore Line were built (and it is freely predicted by District officials that increased Peninsula population growth and rapid transit patronage will necessitate a second Peninsula "express" line along the S. P. Bayshore alignment), the potential of this route for the development of the Mission District and nearby residential communities will be unlimited when more local stations can be added to the Mission Line, making it more of an intra-city line.

The experience of Toronto in the rebirth of the upper Yonge Street area, is cited as an example. The upper Yonge Street area is similar to San Francisco's Mission District. Land value increases near the new Toronto subway have been found to be spectacularly higher than at locations away from the subway, and increased tax revenues attributable to these increases in property values exceed the annual debt service charge for the construction of the subway.

It was felt, also, that the Market Street Streetcar Subway, as proposed by the Rapid Transit District, would provide semi-rapid transit service for the patrons of the tunnel car lines, estimated to be about 60,000 persons per day when the downtown subway is in operation. If the recommendations of the Transportation Technical Committee and the Council could have been followed to extend the subway to the east portal of Twin Peaks Tunnel, and to the Golden Gateway Project, residents of most of the Sunset and West of Twin Peaks communities could enjoy rapid transit service by P.C.C. streetcar trains, that would approach full rapid transit service in speed and convenience.

At a later time when patronage increased to a point where the P.C.C. cars were inadequate for the load, full rapid transit trains could be substituted and the subway extended from West Portal to Daly City, possibly as an undertaking of the Rapid Transit District in a later-phase program.

Thus, under the modification of the District's August 11 plans recommended by the Transportation Technical Committee and the Mayor's Transportation Council, three of the four basic sectors of rapid transit service recommended in the Committee's earlier report would be covered: (1) the Marin Line, (2) the Twin Peaks Streetcar Subway Line, and (3) the Mission Southern Freeway Line, and with every indication that the Bayshore Line would be added in a later-phase construction period.

#### Comparison With the 1956 Bay Area Rapid Transit Plan

A measure of the progress achieved by the Transportation Technical Committee and its consultants can be gained by contrasting the routes studied by the Bay Area Rapid Transit District consulting engineers in their May 2, June 6 and August 11 reports with the plan approved by the San Francisco Bay Area Rapid Transit Commission in 1956:

1. Marin Line: A subway was then proposed to go under Columbus Avenue from its Kearny and California Street terminal, the route to proceed thence via an elevated structure over Lombard Street and through the Presidio to the Bridge providing service to the Western Addition or Richmond communities.
2. Peninsula Line: An elevated would have gone over Valencia Street and over Alemany Boulevard to the county line. The service would have been about the same as now proposed, except that under the characteristics of services then proposed (train frequency and fare schedules) there appeared to be little chance for San Franciscans to make use of it for intra-city rides.
3. Market Street Subway: Only a two-track structure was contemplated under Market Street, with space to be left in Market Street for the city to build its own subway at its own expense, thus providing no benefit to tunnel car line patrons from provision of District-built downtown subway facility.

The differences of the present plans from the 1956 plans all came about largely as a result of the staff work of the Transportation Technical Committee in its constant liaison work with officials and consulting engineers of the Bay Area Rapid Transit District, who at all times, were cooperative and anxious to do all that could be done to explore all ideas presented.

Members of the committee have every reason to believe that had this concentrated and coordinated effort not taken place, the District's current plans might be much more like those of the 1956 report, with its great mileage of elevated structures in San Francisco, in locations giving less service to San Franciscans.

#### Other Accomplishments of the Committee

1. Preliminary engineering on the four basic rapid transit routes, which District consultants utilized considerably in making more definitive route layouts and cost estimates.
2. A cordon count of all persons entering and leaving the downtown area on a typical business day in 1959, which provided information of great value for San Francisco and District patronage analyses.

3. An origin-destination analysis of all trips by automobile and transit within the city, undertaken jointly with the District consultants (results of which have been utilized in the Trafficways Reappraisal survey report.).

4. Preliminary studies of feeder line requirements for coordinating municipal Railway service with rapid transit.

#### Next Steps on the Rapid Transit Plan

The plans approved by the Board of Directors of the Bay Area Rapid Transit District on February 9 will be used as a basis for drawing up a financial analysis and feasibility report. In the spring or early summer of 1961, the plans and financial analysis will be referred to the five counties' Boards of Supervisors for endorsement, recommended changes, or rejection, as required by the State Public Utilities code.

If one or more of the county Boards of Supervisors rejects the plan or proposes major changes, provisions of the State Public Utilities Code provide that the District Board of Directors may, during a subsequent six month period, amend the plan to satisfy objections, or draw up a new plan recognizing the elimination of the rejecting county.







When approval of a final plan has been accomplished by the Boards of Supervisors of participating counties, the plan and an accompanying bond issue will then be presented to the electorate of the counties within the District.

If two-thirds of the voters in such an election approve the proposal, steps can then be taken to start to construct the Bay Area rapid transit system. Currently this election is scheduled to be held at the time of the State primary election in June of 1962.

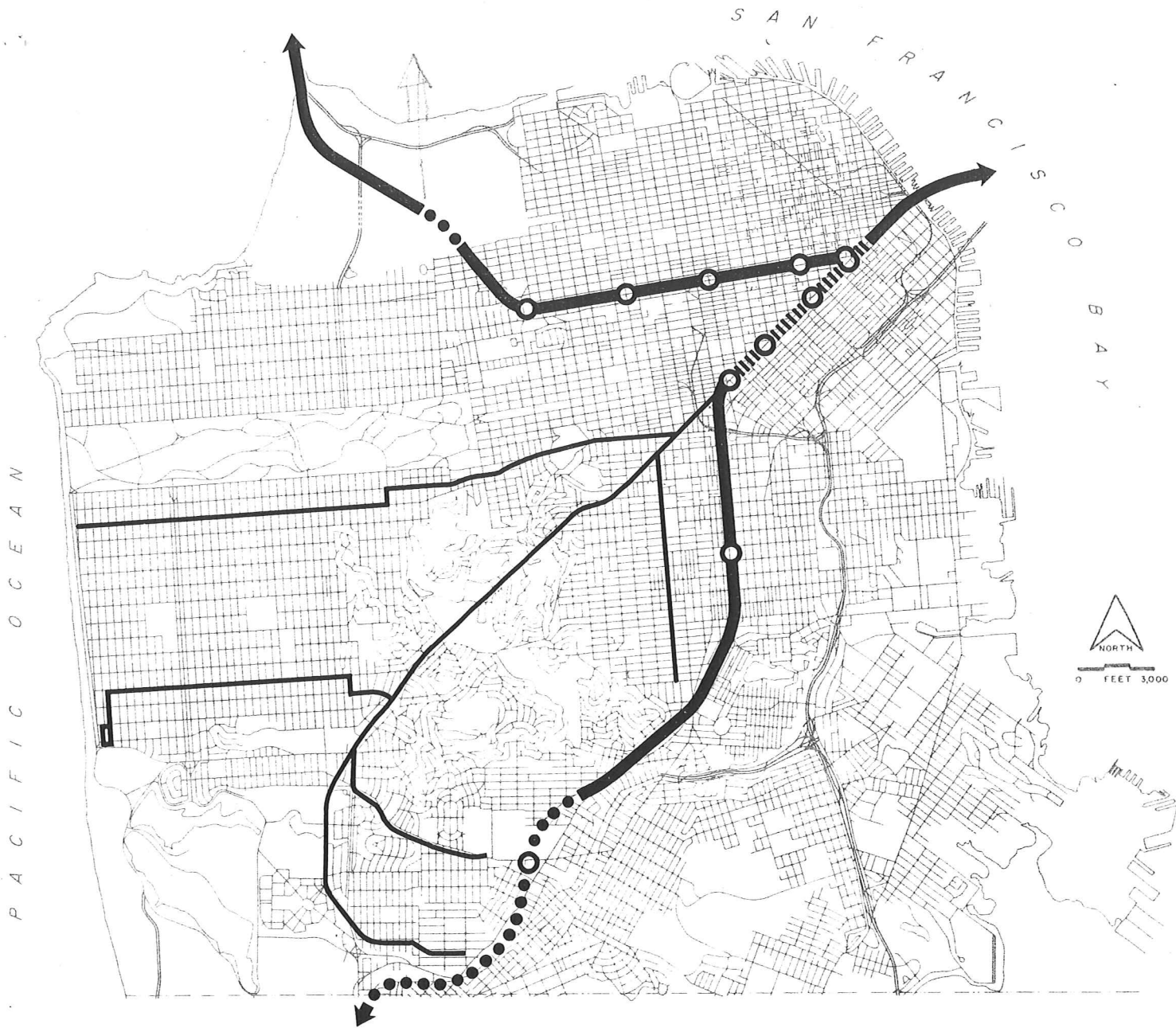


## RAPID TRANSIT FOR SAN FRANCISCO

# RAPID TRANSIT DISTRICT PROPOSALS AUGUST 11, 1960

-  SUBWAY
-  STATION
-  TWO-LEVEL SUBWAY
-  SURFACE RAPID TRANSIT LINE
-  ELEVATED RAPID TRANSIT LINE
-  SURFACE CAR LINE FOR PCC SUBWAY





## RAPID TRANSIT FOR SAN FRANCISCO

# RAPID TRANSIT DISTRICT PROPOSALS FEBRUARY 9, 1961

- SUBWAY
- STATION
- TWO-LEVEL SUBWAY
- SURFACE RAPID TRANSIT LINE
- SURFACE CAR LINE FOR PCC SUBWAY